REMARKS

Claims 1 and 11 are objected to for allegedly failing "to disclose an acceptable range for the parameter λ, making the claim language indefinite." Specifically, the Office Action alleges that "[t]he range of visible light is assumed as the proposed range for examination purposes, however, an explicit range or value should be stated within the claim to fully set forth the metes and bounds of the claim." Applicants respectfully disagree.

Initially, Applicants respectfully assert that the presumption that "[t]he range of visible light is assumed as the proposed range for examination purposes" is not necessarily correct. Use of the variable "λ" is consistently used to represent a wavelength of light, without any restrictions regarding a wavelength range or ranges. Accordingly, Applicants respectfully assert that limiting the use of the variable "λ" recited in the claims to "visible light" is not correct.

Applicants respectfully assert that use of the variable "λ," as recited by claims 1-20 is definite, and distinctly and particularly points out the subject matter which Applicants regard as the invention. For example, each of independent claims 1 and 11 recite relationships of:

$$1.35 < R1/\lambda < 1.75;$$

$$0.5 < R2/\lambda < 0.7; \text{ and}$$

$$0.1 < R3/\lambda < 0.15,$$

wherein each of the quantities "R1/λ," "R2/λ," and "R3/λ" is a ratio of a specific retardation value to a specific wavelength of light. Accordingly, Applicants respectfully assert that the metes and bounds of claims 1 and 11 are clearly defined since each of the quantities recited by claims 1 and 11 are clearly defined.

In addition, Applicants respectfully assert that use of the generalized term "$R(V)/\lambda$" is a term of art, as evidenced by at least Nakamura ('197). In addition, Applicants respectfully submit that claim 1 of Nakamura ('197) clearly recites the generalized term "$R(V)/\lambda$," thereby clearly demonstrating that Applicants' use of the terms "$R1/\lambda$," "$R2/\lambda$," and "$R3/\lambda$" in each of independent claims 1 and 11 is common terminology in the display arts.

Applicants respectfully submit that if the objection to independent claims 1 and 11 is maintained, that a rejection under 35 U.S.C. § 112, second paragraph, be introduced in order to properly address the features that are allegedly indefinite. In addition, Applicants respectfully request that further explanation as to why use of the term "λ" is considered indefinite in view of the arguments presented above.

Claims 1, 2, 5, 11, 12, and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakamura (US 6,137,554) in view of Nakamura (US 5,744,197), claims 4 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakamura ('554) in view of Nakamura ('197) and Noguchi (US 5,736,066), and claims 6-10 and 16-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nakamura ('554) in view of Nakamura ('197) and Hashimoto (US 6,657,690). Applicants respectfully traverse these rejections as being based upon references that neither teach nor suggest the combination of features recited by at least independent claims 1 and 11, and hence dependent claims 2-10 and 12-20.

Independent claims 1 and 11 both recite an optically compensated birefringence (OCB) mode liquid crystal display (LCD) device including a liquid crystal material layer "having a splay state when a voltage is not applied and having a bending state when a transition voltage is

applied." In contrast to Applicants' claimed invention, Nakamura ('197) specifically teaches

(col. 4, lines 46-51) that values for the optical phase different (Δnd) are obtained when V1=2V

and V2=6V. Accordingly, Applicants respectfully assert that Nakamura ('197) fails to teach or

suggest a first retardation value (R1) of an OCB mode LCD device in a splay state. Specifically,

Nakamura ('197) fails to teach or suggest a "liquid crystal material layer in the splay state has a

first retardation value (R1) according to: $1.35 < R1/\lambda < 1.75$," as recited by independent claims 1

and 11, and hence dependent claims 2-10 and 12-20.

In addition, Applicants respectfully assert that the optical phase different (Δnd) is

completely different from a retardation value (R), as disclosed by Nakamura ('197). For

example, as shown in Equation (4) of Nakamura ('197), $R(V1) = k_1\Delta nd$, wherein the constant k_1

is disclosed by Nakamura ('197) as being "usually approx. 1/3." Accordingly, as based upon

Equation (4) of Nakamura ('197),

$$R2 = R(V1) = k_1\Delta nd = (1/3)2.25\lambda,$$

such that $R2/\lambda = 2.25$. Similarly, as based upon Equation (4) of Nakamura ('197),

$$R3 = R(V2) = R(V1)(V1/V2) = R(V1)(2/6) = (1/9)1.6\lambda,$$

such that $R3/\lambda = 0.18$, for when V2=6V. Thus, the second retardation value (R2) taught by

Nakamura ('197) is clearly outside of the range cited by independent claims 1 and 11, and hence

dependent claims 2-10 and 12-20.

Furthermore, Applicants respectfully assert that Nakamura ('197) fails to teach or suggest

that the values for V1 and V2 correspond to production of white and black images, respectively.

Specifically, Applicants respectfully assert that the values V1 and V2 are used as exemplary

applied voltage values, and a relationship between the values V1 and V2 and production of

image colors is not disclosed by Nakamura ('197), either implicitly or explicitly.

With regard to claims 5 and 15, Applicants respectfully assert that Nakamura ('554)

merely teaches (col. 6, lines 10-12) that an optical phase difference (Δnd) is within a range of 0.8

to 2.0. Accordingly, Applicants respectfully assert that Nakamura ('554) is completely silent

with regard to a ratio of reflective index anisotropy (Δn) within a range of 1.2 to 1.3, as required

by dependent claims 5 and 15.

Applicants further respectively assert that the Office Action does not rely upon Noguchi

and/or Hashimoto to remedy the deficiencies of Nakamura ('197) and/or Nakamura ('554).

Moreover, Applicants respectfully assert that Noguchi and/or Hashimoto cannot remedy the

deficiencies of Nakamura ('197) and/or Nakamura ('554), as detailed above.

For the above reasons, Applicants respectfully assert that the rejections under 35 U.S.C.

§ 103(a) should be withdrawn because Nakamura ('197), Nakamura ('554), Noguchi and/or

Hashimoto, whether taken individually or in combination, neither teach nor suggest the novel

combination of features clearly recited in independent claims 1 and 11, and hence dependent
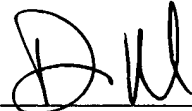
claims 2-10 and 12-20.

CONCLUSION

In view of the foregoing, Applicants respectfully request reconsideration and the timely

allowance of the pending claims. Should the Examiner feel that there are any issues outstanding

after consideration of the response, the Examiner is invited to contact the Applicants'

undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge

the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under

37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also

be charged to our Deposit Account.

Respectfully submitted,

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Dated: December 30, 2004

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1-WA/2317406.1